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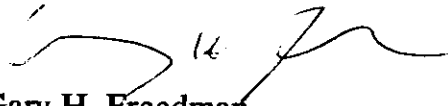
Ms. Becky Austin
Mail Stop B2-35

Re: Wahluke Slope Comment Response

Dear Ms. Austin:

Enclosed are 11 public comments on the North (Wahluke) Slope Expedited Response Action Proposal. Please enter them into the administrative record for the North Slope. If you have any questions please call me at (509) 736-3026. Thank you for your assistance.

Sincerely,


Gary H. Freedman
Unit Manager
Nuclear Waste Program





DEPARTMENT of
NATURAL RESOURCES

Environmental
Planning/
Rights Protection
Program

CONFEDERATED TRIBES
of the

Umatilla Indian Reservation

P.O. Box 638

PENDLETON, OREGON 97801

Area code 503 Phone 276-3449 FAX 276-3317

002155

FILE NAME: _____
RCRA _____
CERCLA _____

Thursday, January 13, 1994

NMWMP - Hanford

Dib Goswami
Washington State Dept. of Ecology
7601 W. Clearwater Ave., Suite 102
Kennewick, WA 99336

JAN 20 1994

Kennewick

RE: North Slope Expedited Response Action Comments

Dear Mr. Goswami:

Enclosed are comments prepared by staff of the Confederated Tribes of the Umatilla Indian Reservation on the Engineering Evaluation/Cost Assessment for the North Slope Expedited Response Action, DOE/RL-93-47, Revision 0, October 1993.

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If you have any questions about these comments, please contact Chris Burford, Hanford Projects Policy Analyst at 503-276-3449.

Sincerely,

Michael J. Farrow

Michael J. Farrow
Director
Department of Natural Resources

Enclosure

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

cc: Donald Sampson, Chairman, CTUIR Board of Trustees
William Burke, Treasurer, CTUIR Board of Trustees
Antone Minthorn, Chairman, CTUIR General Council
Rick George, Program Manager, CTUIR Department of Natural Resources,
Environmental Planning and Rights Protection
Paul Minthorn, Policy Analyst, Department of Natural Resources, Environmental
Planning and Rights Protection
Hanford Projects Staff, CTUIR
Dennis Faulk, Environmental Protection Agency
Walt Perro, Department of Energy
Kevin Clarke, Department of Energy

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Comments on the
Engineering Evaluation/Cost Assessment
for the North Slope Expedited Response Action
[DOE/RL-93-47, Rev. O, October 1993]

Confederated Tribes of the Umatilla Indian Reservation
Department of Natural Resources
Environmental Planning and Rights Protection Program
Hanford Environmental Restoration Project

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

A. The CTUIR's General Concerns Regarding Hanford Remediation and Restoration

On July 21, 1993, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) presented the signatories to the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement or TPA) with the CTUIR's Criteria for Evaluation of Proposed Changes to the TPA. This document described the goals of CTUIR participation in Hanford decision-making. These goals fall into four general categories:

- I. Protection of Tribal sovereignty, including protection of tribal rights in CTUIR ceded territory and areas over which the CTUIR exercises off-reservation treaty rights.
- II. Protection and restoration of the environment, both on the Hanford site and in areas affected by Hanford over which the CTUIR exercises off-reservation treaty rights. Protecting the environment guards the resources upon which treaty rights are based, including Columbia River fisheries and related resources.
- III. Protection of cultural, religious and archeological resources and Tribal rights relating to them.
- IV. Protection of the Umatilla Indian Reservation and its members and residents from hazards caused by Hanford activities and from hazards caused by transportation of radioactive and hazardous materials to and from Hanford.

DOE activities at the North Slope, including the proposed Expedited Response Action (ERA), impact or potentially impact all four of these categories. The level of remediation of the North Slope will directly affect the safety of the area for use by tribal members for treaty-protected activities, such as fishing and plant gathering. Thus the quality of the remediation and restoration of the North Slope may affect:

1. CTUIR members' ability to exercise their treaty rights;
2. The health and safety of natural resources occurring on the North Slope;
3. CTUIR archeological, religious, and cultural resources at the site and tribal member access to them, and ultimately,
4. The health of those tribal members who exercise their legal rights in this area.

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

B. Improper Categorical Exclusion of ERA Activities

Page 2 of the EE/CA states that "In August 1992, a categorical exclusion to the National Environmental Protection [sic] Act [NEPA] was deemed applicable for the removal actions in the ERA." The EE/CA gives no further description of the analysis which was used to reach this conclusion nor is there proper documentation of the justification for this decision (i.e., Decision Memo). Any EE/CA should include this type of information whenever, as in this case, the document relies upon it. CTUIR staff formally request a copy of the Decision Memo for this ERA.

Moreover, the CTUIR finds the conclusion that the ERA is covered by a categorical exclusion highly suspect. Department of Energy NEPA Categorical Exclusion (CX) regulations are codified at 10 C.F.R. § 1021, Appendix B to Subpart D. These regulations state that CERCLA removal actions are generally excluded from the need to perform an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) under NEPA.¹ A non time-critical ERA, such as this one, is one type of removal action.²

This EE/CA fails to note, however, that according to these same regulations, all categorical exclusions, including this one, are inappropriate when certain conditions are present. In particular, to qualify for a categorical exclusion, "a proposal must be one that would not . . . adversely affect environmentally sensitive resources."

Environmentally sensitive resources include, but are not limited to: (i) Property . . . of historic [or] archeological . . . significance designated by Federal, state or local governments or property eligible for listing on the National Register of Historic Places; (ii) Federally-listed or endangered species or their habitat . . . , Federally-proposed or candidate species or their habitat, or state-listed endangered or threatened species or their habitat.³

As described later in these comments, the plant and wildlife surveys that have been done for this EE/CA are inadequate because

¹10 C.F.R. § 1020, Appendix B to Subpart D, B6.1.

²40 C.F.R. § 300.415(b)(4).

³10 C.F.R. § 1020, Appendix B to Subpart D, B. ("Conditions that are Integral Elements of the Classes of Actions in Appendix B.").

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CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

they were not conducted consistent with standard protocols for such surveys. The mere inadequacy of these surveys alone should disqualify the proposed ERA from categorical exclusion. The burden is on DOE to demonstrate that its action meets the minimum qualifications for excluding this analysis from documentation in an EA or EIS. By failing to conduct surveys at the proper time of the year to identify occurrence of species or their habitats, there is no basis from which to judge potential effects. Therefore, DOE has failed to meet its own standards for such an exclusion.

C. Incomplete Consideration of Future Land Use Options/Issues

On pages 2, 31, 33 and 36, this engineering evaluation/cost analysis (EE/CA) for the ERA describes the future land uses that DOE considered when developing alternatives for the EE/CA. Only two potential land uses were considered: 1) a National Wildlife Refuge, in which case access to the area would be "restricted," and, 2) an "unrestricted" land use option, which "would allow the property to be developed under private ownership."

These alternatives are incomplete for several reasons. Treaty activities include the right to gather plants (for among other things, food and medicine) and the rights to hunt and fish. Because contaminants at the site may have bioaccumulated into plants, wildlife and humans, there is potential risk that tribal members could be injured if they exercise their treaty-reserved rights at the North Slope. Thus, even if the North Slope is designated a National Wildlife Refuge, the area must be remediated to the level of "unrestricted" use. Anything less would constitute a risk to tribal members' health and could interfere with tribal members' exercise of their treaty rights.

The EE/CA's ignoring of tribal uses is particularly disturbing, because those uses were explicitly recognized in the findings of the Hanford Future Site Uses Working Group (HFSUWG).⁴ The purpose of this working group was to establish the parameters of possible future uses for various areas of the Hanford Site, including the North Slope (referred to as "North of the River" by the working group). All documents produced for Hanford activities that address future land uses should integrate the findings of the Hanford Future Site Uses Working Group. This EE/CA has obviously ignored the working group's findings, and as a result, all viable alternatives have not been considered.

⁴Published in The Future for Hanford: Uses and Cleanup: a Final Report of the Hanford Futures Site Uses Working Group, December 1992.

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

The North of the River area provides the first pivotal test of visions proposed by the HFSUWG. The HFSUWG developed three options and one cleanup scenario for North of the River. Two of the options explicitly recognize tribal uses of the lands and one of these considered reserving North of the River for tribal access and practice of traditional lifestyles. Each option is discussed below with CTUIR rights and responsibilities in mind.

Option 1: Agriculture, Wildlife and Native American Uses. This option combines features not compatible with tribal practices. Agricultural practices essentially destroy and alter the ecology of large areas, which eliminate natural plant communities that harbor traditional plants and animals used by tribal members.

Unfortunately, this option also states that "Native American uses would be assumed to occur only in certain areas along the River." Restricting areas for the practice of traditional lifestyles is incompatible with Treaty-reserved rights of the CTUIR.

Option 2: Wildlife and Wildlife/Wild Lands Recreation. Although this option is an improvement over Option 1, the potential that "existing recreational uses and opportunities for research and education would continue" raises concerns over the protection of cultural resource sites from looting, increased erosion, and other adverse impacts.

Option 3: Native American Uses. This option was added to specifically recognize the off-reservation, Treaty-reserved rights of the CTUIR and other native peoples. Of the three options presented in the Final Report of the HFSUWG, this option best represents tribal interests and protects the rights guaranteed in the Treaty of 1855.

The EE/CA makes no mention of the working group's Option 3 as a potential land use for North of the River. If "remediation criteria are dependent on future land usage,"⁵ the EE/CA cannot legitimately ignore the working group's Native American Uses option as a basis from which to develop alternative(s).

Moreover, all three options, as considered by the HFSUWG, are based on unrestricted status, which means that "contamination would not preclude any human uses of an area." In order for tribal members to fully exercise their treaty-reserved rights, the entire area North of the River must be remediated to unrestricted status.

⁵EE/CA, p. 2.

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CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

D. Failure to Assess Radiation Hazards

The ERA provides no quantifiable justification for releasing the North Slope from the need for completing radiological surveys. A mere three sentences on page 13 address this issue and they are conclusory. The reference to Appendix G is misleading as well, because it simply repeats the conclusory statement that no radiation hazard is present. Recent environmental surveillance activities, primarily collection of atmospheric radiological data, indicates that the North of the River Area has received airborne contaminants above background levels due to its downwind location.

Historical Hanford operations could have potentially contributed significant contaminants to the North Slope as either airborne emissions or skyshine because of the close proximity to reactors along the Columbia River. As such, radiological surveys for wildlife, soil, and vegetation must be completed in order to assess the presence and potential of contaminant bioaccumulation. These studies must be conclusive in their quantification of risk to the environment and humans prior to the area being considered for any land exchange proposal.

E. Inadequate Threatened, Endangered, Sensitive, Candidate, and Monitor Species Surveys (TESCM)

The field surveys conducted to locate habitat and occurrence of plant and wildlife TESCM species were wholly inadequate to determine significance of potential environmental impacts. The EE/CA recognizes this fact in Appendix L, Flora and Fauna Survey (p. L-3), where it is stated that "It needs to be stressed that the timing of the survey was not ideal for plant identification and that a number of species were not identified or observed that may be present." Proper TESCM species surveys, performed at the appropriate times of the year, must be conducted before the impacts to species or their habitats can be adequately assessed. Appropriate protocol for completing these biological evaluations would include conducting surveys at different times of the year in order to take into account individual species phenology.

Therefore, additional surveys need to be performed prior to any ground disturbing activities to ensure that these plant species are identified and protected. Minimizing disturbance as much as possible and maintaining future options in areas containing relatively intact native plant communities during characterization/removal/remedial actions is crucial if successful restoration of native plant communities is to be achieved.

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

The identified seasonal operating season (September through February) appears to be sufficient to protect nesting raptors species from disturbance during their reproductive period. However, nest sites must first be located to ensure that disturbance of reproducing adults and immobile/pre-fledging young is avoided. We recommend that each site scheduled for removal/remedial activities be monitored prior to initiation of project activities to determine if species of concern are using the area. If active nest sites are identified appropriate mitigative measures should be implemented including delaying activities that may cause premature fledging or disturbance to species.

In addition, increased bald eagle activity in the Hanford Reach normally occurs between late fall and early spring. Most project activities will be located a considerable distance from the Columbia River where most eagles will be concentrated. However, measures should be taken to minimize disturbance of roosting and perching eagles during this time period, particularly if aircraft are to be used for support of project activities.

F. Protection of Columbia River Water Quality

Those sites within close proximity to the river and scheduled for ground disturbing activities should be revegetated as soon as practicable following completion of remedial/removal actions in order to minimize erosion potential and sediment transport to the river by either water or wind. Wind-blown sediment transport may in fact comprise the greater threat because unvegetated and unprotected excavations are starting points for initial blowouts or source areas for the rapid spread of deflation zones and further devegetation. If seasonal restrictions on revegetation activities occur, adequate mitigation measures may include placement of sediment traps, mats, grading, etc., to minimize overland sediment transport, potential for gully development, or other rapid erosional stripping, and associated degradation of Columbia River water quality.

The ERA also includes several sites in close proximity to the Columbia River (within 1/2 mile) that could contribute contamination to the river via groundwater. CTUIR technical staff concur with the EE/CA's acknowledgement that groundwater characterization may be necessary following additional sampling at several of the sites, particularly H-90, where high lead and total petroleum hydrocarbon (TPH) concentrations were identified. The concentrations reported for lead at the H-90 locations raised serious concern because it is not known how extensive this contamination is, only that it is significantly above the Model Toxics Control Act, Method A Action Levels.

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

The TPH concentration values reported in Appendix H are undifferentiated. Normally, TPH concentrations reported from EPA 8015 gas chromatograph analyses are subdivided into gasoline, diesel fuel, or waste oil constituents (i.e., by total number of carbon atoms). The migration potential and distance that such contaminants can travel is highly dependent on the complexity of the molecular structure. That is, simple and low atomic weight compounds such as gasoline have a considerably greater potential to travel significant distances in the subsurface and/or to impact groundwater. Such differentiation would more accurately characterize the nature of contamination and provide a much more sound, quantitative basis for assessing contaminant migration potential.

Furthermore, in areas of petroleum contamination, EPA analytical protocol also typically requires that 8020 analyses for volatile or semi-volatile organics such as benzene, toluene, ethylbenzene, and xylenes be performed. Only toluene values were reported in the results.

The very high values reported for both lead and TPH should have resulted in additional sampling and characterization at the time. It is not clear from the data presented that sufficient and representative sampling was completed in those areas containing elevated contamination levels. Moreover, the "analogous approach" (see p. 12 of the EE/CA) may not necessarily be justified or defensible, especially for the landfills and former homestead areas. Concentration levels of various contaminants reported in Appendices H and I vary widely from site to site, indicating that local impacts may differ significantly.

Using the H-90 site as an example of the need for additional sampling, CTUIR technical staff believe that additional characterization efforts should be conducted to ensure that the vertical and lateral extent of contamination within the soil column is fully delineated. Such results may identify the need for groundwater monitoring and subsequent evaluation of potential discharge to the Columbia River, as well as additional remedial activities, if potential impacts to groundwater are identified. Staff formally request to be kept apprised of these additional characterization efforts.

G. Inadequacies of the Cultural Resources Survey

The CTUIR is concerned that the limited cultural resource surveys that have been done focus only on the limited sites where ERA activities will take place. Context is important in cultural resource management research. Without a comprehensive survey and analysis of cultural resources occurring on the North Slope, the

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

CTUIR and DOE cannot know how activities at one location may impact other cultural resources. There is no common or systematic approach to holistically manage these valuable resources. This approach could be achieved if the DOE would implement the Hanford Site Cultural Resources Management Plan in full and fulfill its obligation to consult with tribes concerning cultural resources on the Hanford Site.

The normal trend for federal agencies is to conduct National Historic Preservation Act, Section 106, cultural resource inventories on a project-by-project basis, which is the case with the survey conducted for this EE/CA. This piecemeal approach is in many ways detrimental to CTUIR cultural resource concerns and could potentially result in degradation of the resources over time. Without a broad approach to managing cultural resources on the North Slope, the desired end result, which is protection of these resources, cannot be achieved.

The cultural properties identified during this limited cultural resource survey were historic. No Native American historic or prehistoric resources were identified despite more than 12,000 years of prehistoric and 150 years of historic tribal use of this area. We also note that in some cases homestead sites are located on aboriginal sites; apparently this has not been evaluated.

There is concern that no work has been conducted to identify and evaluate possible Traditional Cultural Properties. The EE/CA contains no discussion of the possible impacts of the dump sites, the proposed actions, and downwind radiation on Tribal cultural resources, such as traditional cultural properties and plant and animal resources. Furthermore, much of the construction and development of dump sites that has occurred on the known properties was conducted prior to current cultural resource inventory standards and prior to enactment of the National Historic Preservation Act. As a result, cultural resources may have been inadvertently affected by those activities, and activities proposed in the ERA may expose and degrade important unrecorded cultural resources.

In addition, the region is located within an area characterized by rapid geologic change. Such change may also have caused cultural resources to be buried, dismembered, or transported away from their original location. No geomorphological cultural resources assessment of the North Slope has been performed.

Because so little is known about potential cultural resources that could be affected by ERA activities, an historic archaeologist should be present during all ERA ground-disturbing

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

activities. Such a monitor could ensure proper identification, recordation, and protection of any cultural resources that might be disturbed during project activities. It is inappropriate to assume that workers would be able to monitor for cultural resources while working.⁶ Workers cannot be expected to recognize many types of cultural materials because they may not be trained in this area and should not be distracted from safely performing their principal jobs.

H. Shrub-steppe and Native Plant Community Restoration Plan

Revegetation of major portions of the Hanford Site, including the North Slope, will be necessary following completion of remedial activities. We recommend that a broad-based shrub steppe/native plant community restoration plan be developed to ensure that appropriate seed stock for indigenous grasses, forbs, and shrubs is available at reasonable costs, and that a consistent, coordinated approach for vegetation restoration on the Hanford Site is implemented.

Section 5.3 of EE/CA states that "revegetation activities will be performed during the appropriate season using Threatened or Endangered Species seeds, if available." Native plant community and wildlife habitat restoration will require much more thorough planning than just putting seeds into the ground. Issues associated with exotic species invasion at Hanford (e.g., cheat grass) in association with re-establishment of indigenous plant species, particularly those used by Native Americans for subsistence and medicinal uses, need to be addressed. Finally, using seed from threatened or endangered species is a "taking" under the ESA. The required permit for such an activity may prove difficult to obtain.

I. Conclusion

CTUIR technical staff support an ERA approach to the particular hazards identified in the EE/CA and believe that the preferred alternative is a viable option that will result in timely characterization and remediation actions. However, several of the concerns raised in these comments need to be addressed prior to initiation of ground disturbing activities and those specific issues raised concerning final remediation and restoration need to be re-visited prior to the area being released for future land exchange.

⁶The letter from M. K. Wright to Frank Gustafson, on page M-4 of the EE/CA appendices makes this assumption.

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CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

Concerns remain, however, that DOE will take a generally piecemeal approach to remedial activities at the North Slope, and that, as a result, critical concerns will "fall through the cracks." DOE must keep in mind, as it performs its remediation planning for this site, that once this site is transferred from DOE control, tribal members may have ready access to this site and may consume plants and wildlife from the North Slope. Failure to consider the implications of this information when planning for remediation could well constitute a violation of the DOE's trust responsibility to American Indian Tribes.

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ENVIRONMENTAL PROTECTION AGENCY
REGION 10
717 SWIFT BLVD., SUITE 5
RICHLAND, WASHINGTON 99352

FACSIMILE SERVICES

FAX NUMBER: (509) 376-2396

Verification: (509) 376-6865

Date: 1-10-94

From: Donnie Faulk

Hanford Project Office

To: Dib Goswami

Office: Ecology

Destination Fax Number: _____

Number of Pages 3 (including this cover sheet)

(Short message below)

North Slope Comments.

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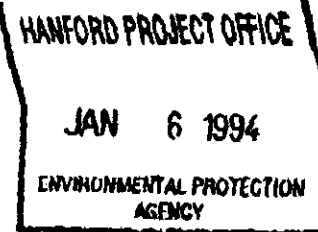
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EPA HANFORD PROJ. OFC. ID:509-376-2396

3434 14th Ave W
Seattle, WA 98119



January 4, 1994

Washington Department of Ecology
Olympia, WA 98504
and
U.S. Environmental Protection Agency
Seattle, WA 98101 and Richland, WA 99350

Gentlemen:

I have had an opportunity to read the North Slope Expedited Response Action Proposal prepared by the U. S. Department of Energy, and would like to comment on it and to indicate my preference for the disposition of the portion of the Hanford Site known as the North Slope.

1. I believe that the North Slope should continue to be managed as wildlife refuge and habitat and should remain as property of the United States or the State of Washington.
2. I believe that, if the North Slope is offered for sale as agricultural land, then the descendants of former inhabitants of this land, including aboriginal inhabitants, should:
 - a. have exclusive first right of purchase of the lands
 - b. be offered the land at a price which does not include the cleanup costs referred to here.
3. I believe that if the North Slope is offered for sale, as agricultural or general use land, to any purchasers other than descendants of former inhabitants, that the costs of cleaning up the land as defined in Section 6.3 on page 37 of the Proposal, should be borne by those purchasing the land. Such costs could add \$500 per acre or more to the price of the agricultural land.
4. I do not believe that the suggestion that areas requiring revegetation should be planted with threatened or endangered species should be adopted.

Reasons for these suggested courses of action follow:

Reason for #1: The state is losing shrub-steppe habitat rapidly. This habitat is the natural environment of much of the state's flora and fauna, including some relatively rare plants and animals. Any plans to dispose of public lands in this habitat should therefore be carefully reviewed before approval. The North Slope is an area of significant size (better than 60,000 acres). It adjoins the Columbia River for a distance of more than 30 miles. Natural islands on the river afford habitat for waterfowl, gulls, and other birds. Considering the scarcity of natural and undeveloped riparian habitat, especially with adjacent upland, in this country, it would be the utmost folly to convert such an area to other uses.

Neither the body of the Proposal nor the appendix on Flora and Fauna provided information adequate to compare this land to existing wildlife refuges and other lands managed as native habitat. I interpret a statement on page 2 of the Proposal to mean that an Environmental Impact Statement on the proposed future use of this site is not required by law. Whether this is so or not, an EIS definitely should be researched and prepared to address the points raised above, and evaluating the North Slope as native habitat.

Reason for #2: This is a case in which a relatively few individuals were required to make a sacrifice - giving up their homes and farms, for the national good. It would be just to allow them, or their immediate descendants, to buy back those lands for the same price, in constant dollars, which they

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were paid when the lands were expropriated. They should not be required to pay cleanup costs for damage done to the land by the government since it held the land.

Reason for #3. Conversely, other individuals who might offer to buy these lands should not benefit without paying for a cleanup, to be paid for from general tax revenue, of lands that they wish to purchase, which would not require such expensive cleanup if it were managed as wildlife habitat.

Reason for #4: On page 35 of the Proposal it is suggested that disturbed areas on the North Slope be revegetated with threatened or endangered plant seeds. There are numerous reasons why this should not be done. Perhaps the most important would be to prevent disturbance by seed collectors of sites where such plants currently live. Rare plants often have very particular site requirements, and are protected best by preserving habitats where they currently live.

A second reason would be that careful site evaluation would be needed before any species not living currently on an area, or known to have lived there in the recent past, should be introduced to that area. The introduction of plants or animals to new environments almost never results in an increase in global biodiversity, and is likely to reduce it. It already exists in its native habitat, and it contributes to global biodiversity by being there. Introduction of a plant or animal to a new environment, on the other hand, is very likely to cause a pre-existing species (or several) in that habitat to be displaced, either by competition or by predation. Purple loosestrife in Washington wetlands, and the European fox in Australia are just two examples. The U.S. Fish and Wildlife Service prepares a species recovery plan, and posts it in the federal register for public comment, before attempting an action such as this with a rare or endangered species.

Thank you very much for the opportunity to comment on this proposal

Sincerely yours,

Michael Marsh
Michael Marsh, Ph.D. (Zoology)

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CURT SMITCH
Director



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FILE NAME: _____ NMWMP - Hanford
RCRA _____
CERCLA _____

STATE OF WASHINGTON

JAN 07 1994

DEPARTMENT OF WILDLIFE

1550 Alder St. NW, Ephrata, Washington 98823-9651 Kennewick

January 5, 1994

Dr. Dibakar Goswami
Washington State Department of Ecology
7601 W. Clearwater Ave, Suite 102
Kennewick, WA 99336

Dear Dr. Goswami:

Subject: Washington State Department of Wildlife Comments on the North Slope
Expedited Response Action Proposal, DOE/RL-93-47, Rev. 0.

The Washington State Department of Wildlife (WDW) appreciates the opportunity to comment on the subject document. We ask you to consider our general comments below and our specific comments that are included in the enclosure to this letter.

Shrub-steppe habitat has been designated by the WDW as a Priority Habitat. Such a designation represents a proactive measure to help prevent species from becoming threatened and endangered in habitats that support a unique or wide diversity of wildlife. Less than 40 percent of the original acreage of shrub-steppe in the State of Washington remains today. Much of what remains either is already degraded and fragmented, or it is threatened by development and agricultural expansion. Shrub-steppe is a fragile ecosystem that is easily disturbed. Moreover, it supports a number of obligate species, many of which in Washington have experienced population declines. Some of these species already are listed species or are candidates for protection. Retention of the North Slope in a status protective of wildlife and the shrub-steppe habitat will help preserve natural resources of high value to the State of Washington.

In consideration of the above findings the WDW supports the U.S. Department of Energy's (USDOE-RL) preferred alternative of Characterization and Hazard Mitigation as the most appropriate remedial alternative for the North Slope. We conclude that this alternative is sufficient to protect wildlife values and related public recreation. Moreover, the preferred alternative achieves the best balance between the need for adequate assessment of whether hazardous materials are present and the need to avoid unnecessary disturbances of wildlife and habitat as a result of unwarranted removal actions. Finally, the preferred alternative is consistent with WDW's previously stated support for use of the North Slope as a wildlife refuge (Letter, Smitch to Governor's Policy Staff, State of Washington, dated November 2, 1992).

Dibakar Goswami
January 5, 1994
Page 2

If you have any questions relative to our comments, please contact John Hall at 509-372-1189 or call me at 509-754-4624.

Sincerely,



Tracy Lloyd
Regional Habitat Program Manager, Region 2

TL:jah

Enclosure

cc: Ted Clausing, WDW
Ray Duff, WDW
John Hall, WDW
Gordon LaVoy, WDW
David Frederick, USFWS
David Goeke, USFWS
Doug Sherwood, USEPA
Walter Perro, USDOE-RL

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Washington Department of Wildlife Comments on DOE/RL-93-47, Rev. 0,
North Slope Expedited Response Action Proposal

1. Cleanup decisions must be based on the intended use of the land. The Expedited Response Action (ERA) Proposal does not adequately address how Public Law 100-605 and its requirement for a comprehensive study of the Hanford Reach play an important, if not controlling, role in determining the land use for the North Slope. The result of the study was a Draft Environmental Impact Statement (DEIS) whose Proposed Action would establish the North Slope as a wildlife refuge. The Law and the DEIS should be included in the ERA as rationale for the intended land use. The Law and the DEIS provide an important basis for the U.S. Fish and Wildlife's listing the area as its number one priority in land acquisitions for future wildlife refuge areas.
2. Because future land use may result in the North Slope being managed as a wildlife refuge, the ERA should indicate that the Hazard Removal alternative, in the absence of characterization data that would suggest a risk to wildlife from exposure to hazardous materials, could potentially result in unnecessary wildlife and habitat disturbance.
3. Several times in the document reference is made to basing environmental sampling locations on areas of stressed vegetation. Sampling, however, consisted of subsurface soil samples. Additional characterization of landfill sites will be accomplished under the Characterization and Hazard Mitigation alternative. As a means of assessing both the presence of contaminants and the possible effects on the biota, the USDOE-RL should consider sampling vegetation for potential contaminants of concern. Samples should be collected in areas atop the landfill sites where surveys indicate the vegetation has been stressed. Appropriate control samples also should be collected.
4. Floral and faunal surveys were performed at a time (i.e., late July 1993) that was inappropriate for many plant and wildlife species of concern on the North Slope. Thus, seasonally appropriate surveys will need to be repeated at those sites previously surveyed, especially if cleanup work extends past February 1994. Moreover, for those sites not previously surveyed (e.g., PSN-01, PSN-80, and H-06; see page L-15 of the ERA), seasonally appropriate surveys will need to be completed before commencing cleanup work at these sites. Cleanup and characterization activities, as a rule, must be sensitive to the seasonal use of the habitat by easily disturbed species, such as raptor use of tree stands. Moreover, cleanup activities should endeavor to preserve the integrity of these high use areas.
5. The fate of the nonhazardous materials that are excavated under the Characterization and Hazard Mitigation alternative needs to be clarified, especially if the fate differs between landfill H-06-L (to be totally exhumed under this alternative) and the remaining nine landfills. Section 6.4 (3rd sentence) states that nonhazardous materials would be returned to the landfills from which they originated. Does this statement apply to landfill H-06-L?

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6. All of the cleanup alternatives, with the exception of the No-Action alternative, have the potential to disturb habitat. Shrub-steppe is fragile and difficult to revegetate once disturbed. The ERA does not adequately address revegetation. We recommend that the 8th paragraph of Section 5.3 be deleted and replaced with the following:

Excavated areas will be recontoured with the surrounding terrain. For large areas this will be accomplished by a bulldozer and grader. If recontouring would impact native plant communities along the margins of the excavation, additional backfill material will be used to minimize the need for excessive recontouring. Additional backfill material will be obtained, as much as possible, from already established borrow pits. If gravel pit 47 is used as a source of fill material, it will first be confirmed that there are no Piper's daisies (Erigeron piperianus) present. No new borrow sources will be created in areas containing native plant communities. The upper soil layers of the filled-in excavations will be suitable for revegetation.

Revegetation will be performed using native grasses, forbs, and shrubs that are typically found on the North Slope. Seed sources will be local to ensure that the seeds and plants are adapted to Hanford's climate and soils. Specific procedures for planting, watering, and monitoring success will be prepared in consultation with the U.S. Fish and Wildlife Service and the Washington Department of Wildlife. If plantings fail, the need for an additional planting effort will be based on the condition of the vegetation prior to cleanup activities and will be decided in consultation with the above resource agencies.

The above paragraphs, modified as necessary, should be inserted into Sections 5.2 and 5.4.

Revegetation will be a necessary component of the USDOE-RL's cleanup activities across the Hanford Site. Local sources of native plant seeds are few and probably expensive. We recommend that the USDOE-RL consider a broad-based program that will ensure adequate supplies of native plant seeds are available to support cleanup activities, not just the North Slope. Seeds must be adapted to the Hanford environs to ensure the best chance of success.

2002-6026-6



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
3704 Griffin Lane SE, Suite 102
Olympia, Washington 98501-2192
(206) 753-9440 FAX: (206) 753-9008

NMWMP - Hanford

January 11, 1994

JAN 18 1994

Dib Goswami
Washington Department of Ecology
7601 Clearwater Ave., Suite 102
Kennewick, WA 99336

Kennewick

Dear Mr. Goswami:

Enclosed is the corrected version of the comments on the North Slope Expedited Response Action, which were originally submitted by the U.S. Fish and Wildlife Service (Service) to your office on January 4, 1994. Per your telephone conversation with Ms. Liz Block of our Moses Lake sub-office on January 10, 1994, an incorrect version of the second paragraph, under General Comments, Page 1, was included in our letter of January 4. The corrected paragraph follows below:

The document identifies the Characterization and Hazard Mitigation (CHM) alternative as the preferred alternative. We endorse this alternative because it contains the flexibility to further assess remediation activities once additional data are obtained. However, the document should provide additional detail on how assessment of remedial action options will occur and identify the group(s) conducting the assessments and determining remediation actions. We recommend that the Service, as the most probable future manager of the site, be included in the assessment team. The document should specifically state that landfill cleanup or removal will occur if significant contamination is indicated in the characterization phase. The document should include criteria by which landfill characterization results would initiate further monitoring or cleanup actions, such as additional sampling or total exhumation. The document should state to what degree results from the exhumation of one landfill will influence activities at the other landfills. For example, if significant contamination is observed in the exhumed landfill, exhumation of other landfills may be the most appropriate course of action, and characterization of those landfills would not be necessary.

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This paragraph has been included in the enclosed corrected letter. If you have any questions, please contact Liz Block at 509/765-6125. Thank you.

Sincerely,

for Nancy J. Gloman
David C. Frederick
State Supervisor

lb/pjs

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

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January 11, 1994

Dib Goswami
Washington Department of Ecology
7601 Clearwater Ave., Suite 102
Kennewick, WA 99336

Dear Mr. Goswami:

This letter transmits comments on the draft North Slope Expedited Response Action Proposal, Document number DOE/RL-93-47, published October, 1993. The U.S. Fish and Wildlife Service (Service) also provided comments on an earlier version of this document in a letter dated July, 1993 to Walter Perro of the U.S. Department of Energy, from our Regional Office in Portland.

General Comments

The document assumes that the North Slope area will become a wildlife refuge. The Service supports the designation of the North Slope as a wildlife refuge, and our comments are provided assuming that this will occur.

The document identifies the Characterization and Hazard Mitigation (CHM) alternative as the preferred alternative. We endorse this alternative because it contains the flexibility to further assess remediation activities once additional data are obtained. However, the document should provide additional detail on how assessment of remedial action options will occur and identify the group(s) conducting the assessments and determining remediation actions. We recommend that the Service, as the most probable future manager of the site, be included in the assessment team. The document should specifically state that landfill cleanup or removal will occur if significant contamination is indicated in the characterization phase. The document should include criteria by which landfill characterization results would initiate further monitoring or cleanup actions, such as additional sampling or total exhumation. The document should state to what degree results from the exhumation of one landfill will influence activities at the other landfills. For example, if significant contamination is observed in the exhumed landfill, exhumation of other landfills may be the most appropriate course of action, and characterization of those landfills would not be necessary.

Under the CHM alternative, assessment of the need for remediation of landfills should consider the following factors in addition to sampling results. Habitat quality should be taken into account, and disturbance of high quality habitat should be avoided or reduced to the extent possible. For example, if sampling at a landfill indicated marginal contaminant concentrations relative

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to Model Toxics Control Act (MTCA) levels and the landfill was in an area of high quality habitat, a removal alternative may be less appropriate. An assessment should also take into account the possibility of mobilization of landfill contaminants by subsurface irrigation water. Many landfills are in close proximity to irrigated areas, and a widespread, low permeability layer (caliche) occurs several feet below the soil surface which could cause lateral movement of subsurface irrigation water and potential mobilization of contaminants. Near-surface caliche layers were located between 3 and 23 feet below the surface as documented in well drilling logs (Appendix D). Thus, if sampling at a landfill indicated marginal contaminant concentrations relative to MTCA levels, and geohydrological information suggested the possibility of lateral groundwater movement, a removal alternative may be more appropriate.

The additional sampling effort proposed in the CHM alternative will be valuable for identifying contaminant concerns. However, the further sampling of landfills does not address other potential contaminant hazards not associated with landfills. As stated in Appendix F of your document, "unofficial" dumping of toxic chemicals was highly likely to have occurred. The existing water wells have a high potential for contamination from unofficial dumping, either during military occupation or more recently. The Service specifically requests that each well be sampled to assess potential groundwater contamination. Contamination of surface soils from unofficial dumping is the scenario most likely to result in wildlife exposure. If areas of barren and/or discolored soil are observed, surface soils should be collected and analyzed. These recommendations were made in our previous letter.

The assessment of analytical results in Section 2.2 is limited to describing the few compounds and sites which exceeded MTCA action levels and stating that most contaminants and sites were not elevated relative to action levels or information from other sources. The assessment is inadequate for the following reasons.

- MTCA levels were developed to provide protection primarily for human health and groundwater, and are not necessarily protective of wildlife. Because of this, the Service requests that the document also provide an evaluation of the potential effects on wildlife resources of those contaminants which occur at concentrations below the MTCA levels.
- MTCA levels were developed for cleanup actions. Sampling was not conducted to determine whether cleanup was to occur, but was conducted for characterization of the landfills. Limiting data interpretation to exceedences of MTCA levels does not provide information to "characterize" the landfills. The data should be interpreted, to the extent possible, to gain an understanding of on-site contaminants. For example, the assessment should: identify contaminants occurring at concentrations approaching MTCA action levels; determine whether particular contaminants occurred at particular types of sites, such as drywells, or landfills; determine whether a site or sites had high levels of a particular contaminant relative to other sites; and identify any other trends in the data.

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The Service is concerned with the limitations of the plant survey which was conducted at 18 sites in two days during a time of the year when many plants are dry and difficult to identify. The survey should be conducted again next spring when many plants are in flower. In addition to identifying rare plants and animals, surveyors should use a ranking system or some other semi-quantitative method for determining habitat quality and abundance of invasive species. The information recorded should be of sufficient quality to assist in determining the emphasis to be placed on revegetation efforts described in the paragraph below. You may also wish to consider expanding the appendix by taking advantage of databases such as the Washington Department of Natural Resources, Natural Heritage Database; the Washington Department of Wildlife, Wildlife Data Systems; and the Washington Breeding Bird Atlas, maintained by the Seattle Audubon Society.

The statement on the bottom of page 28 that plant disturbances should be kept to a minimum is a necessary concept, but further information is required. We recommend that a separate appendix be developed which addresses details of plant/habitat protection and revegetation. The appendix should include guidelines for minimizing vegetation disturbance and for revegetation procedures. Protection measures need to address the cryptogam layer of the soil, as this is a very important component of the shrub-steppe habitat, and can be destroyed by seemingly minor disturbance such as frequent foot traffic. Plans to minimize fire hazards and contain brushfires need to be established. Successful revegetation by native species is important in areas of high quality habitat, but less important in highly disturbed areas dominated by cheatgrass. Revegetation procedures should identify species to be used, describe planting procedures and post-planting monitoring efforts, and define criteria which would indicate planting failure and trigger another planting effort. Revegetation should also occur on any newly constructed roads at the termination of site remediation. This information was requested in our previous letter.

The appendix which provided information on Nike Missile Base activities was useful and informative. Similar information on antiaircraft batteries should be provided.

Specific Comments

Page 2, paragraph 3. The term "100-IU-3 Operable Unit" is not defined until later in the document, and should be defined at this first use.

Page 7, paragraph 3. The information provided that eight water wells were installed disagrees with information on page 33 which indicates that nine wells were installed. Appendix D gives information for only seven wells, including the one for which records cannot be located. The Service requests clarification.

Page 10, paragraphs 2 and 3. A contaminant survey of irrigation return flows in the Columbia Basin Project was conducted in 1992 by the U.S. Geological Survey and the Service. Two sites in the North Slope area were sampled for water, sediment, and a variety of biota; Wahluke Branch Wasteway and Saddle Mountain Wasteway. The report (Embrey and Block, in preparation) is in draft

form and will be provided to involved agencies upon completion. The data can be acquired, and information requests should be directed to Sandra Embrey, USGS, Tacoma, 206-593-6510. Results indicated that nitrates were somewhat elevated for Wahluke Branch Wasteway but not for Saddle Mountain Wasteway during the sampling periods.

Page 19, last paragraph. Please define "regulatory limits".

Page 27, paragraph 7 and page 28, paragraph 1. Please list the tests that were included in field screening.

Page 28, paragraph 6. The term "environmental hazards" is ambiguous. A better term would be "physical or contaminant hazards".

Page 31, paragraph 7. Please clarify what is meant by "stabilizing landfills."

Page 34, paragraph 6. This section addresses disposal of asbestos waste, but it is unclear how other hazardous wastes, including Ordnance and Explosive Wastes (OEW), will be handled. These should be addressed as well.

Page 34, paragraph 8. This section states that recontouring of landfill excavations will cause less environmental damage than filling from a borrow pit. However, recontouring will destroy vegetation over a much larger area than the original excavation site, and will expose subsurface soils (lacking soil characteristics such as organic matter, soil organisms, and a cryptogam layer) which would be unsuitable for growth of much of the native vegetation and probably result in unsuccessful revegetation attempts. On the other hand, existing borrow pits have already suffered considerable environmental damage. The Service recommends that excavated landfills be filled with material from existing offsite borrow pits.

Page 35, paragraph 1. No Federally-listed threatened or endangered species occur in shrub-steppe habitat on the Hanford site which could be used for reseedling.-----Revegetation with rare or State-listed species does not seem feasible, as seed stock is probably not available in quantity. We suggest revegetating with mixtures of native vegetation including annual and bunch grasses, forbs, and shrubs. The ability to compete with cheatgrass should be one of the factors in selecting species. An expert on shrub-steppe vegetation should be consulted when determining the seed mix. To maintain shrike habitat, large shrubs can be carefully removed and later replanted after site activities are completed.

Page 35, paragraph 3. Please indicate if soil sampling will be of surface or subsurface soil.

Page 37. It is not clear why the Hazard Removal alternative would support all land-use scenarios, but the Characterization and Hazard Mitigation alternative would not support the unrestricted land-use scenario. Is the Characterization and Hazard Mitigation alternative not supportive of the unrestricted land-use scenario because demolition debris is not removed? The Hazard Removal section should contain the statement about unknown hazards surfacing in the future.

which was included in all the other sections, because there may be additional hazards not associated with landfill materials. It is not clear whether the Hazard Removal alternative includes analysis of sides and the bottom of the excavation as described in Appendix P, section 3.0.

Appendix H. Use of the appendix would be improved if the sample type (i.e. landfill, drywell, cistern, etc.) was included in the heading along with the sample number, location, and comments for each sample. A description of a sampling site and purpose for sample H-06-H (near the end of the appendix) was not located in the text.

Appendix P. Soil sampling of landfills seems to be based on locations of metallic objects and soil gas. It seems that contaminants may occur in situations not related to the above items. We recommend that the plan include samples taken randomly, to address these situations. Previous sampling took place near the bottom of the landfill, however, it seems likely that contaminant sources could be near the top of the fill if they were disposed of during decommissioning. This likelihood should be considered when developing a sampling plan. Section 6.1.3 states that decontamination fluids with contaminants of concern below MTCA levels will be disposed of on-site. This procedure is difficult to assess as the composition of the fluids is not identified (water from steam cleaning? solvents or acids?), and the location of on-site disposal (surface or underground) is not described. Surface disposal is not appropriate because MTCA levels are not protective of wildlife.

We request that you make the following changes to your mailing lists. Due to staffing changes at the contaminants branch of our Regional Office in Portland, the Washington State Office will be the primary contact for contaminant issues on the North Slope and Hanford. Please remove Tom O'Brien of the Portland Regional Office from your mailing list and replace with two people: Kate Benkert at the letterhead address; and, Liz Block at our Moses Lake Field Office, P.O. Box 1157, Moses Lake, WA, 98837.

Thank you for the opportunity to provide comments for this document. If you have any questions, please contact Liz Block at our Moses Lake Field Office (509-765-6125).

Sincerely,

Nancy J. Gloman
for
David C. Frederick
State Supervisor

lb/pjs

c: FWS, RO-ES, Contaminants, Don Steffeck, Portland, OR
FWS, RO-RE, Abbey Kucera, Portland, OR
Columbia NWR, Dave Goeke, Othello, WA
Pacific Northwest Laboratories, John Hall, Richland, WA

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REFERENCES CITED

Embrey, S.S. and E.K. Block. In preparation. Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Columbia Basin Irrigation Project, Washington, 1991-92. Water-Resources Investigation Report ???-???. U.S. Geological Survey, Tacoma, WA.

24

Kim R. Smith
P.O. Box 5505
Eugene, Oregon
97405-0505

December 6, 1993

Dib Goswami, Unit Manager
Washington State Department of Ecology
7601 West Clearwater Avenue, Suite 102
Kennewick, Washington 99336

NMWMP - Hanford

DEC 09 1993

To Whom It Might Concern:

Kennewick

RE: North Slope Expedited Response Action
Public Comments

I am writing in response to the invitation by the Washington State Department of Ecology for comments regarding the Wahluke Slope Expedited Response Action, as announced in the Oregonian newspaper on December 5, 1993.

I was a citizen of the Tri-Cities area for about four (4) years from 1979 to 1983, and worked for a contractor of the U.S. Department of Energy during that time. Since then, I have become a resident of Oregon, and am now working in a field that acquaints me with radiological issues associated with the Hanford Site. Regrettably, I have not had an opportunity to review the proposed Response Action available at the Portland State University Library.

My comments concern the present radiological condition of the Wahluke Slope site. From 1944 through the 1960s, huge amounts of radioactive materials were released from the stacks of the chemical reprocessing plants in the 200 Areas of the Hanford Site, in the form of radioactive particles of Plutonium, Ruthenium, Iodine and other radionuclides, some with long half-lives (Pu has a half-life of 24,000 years). Until about 1953 with the building of the Redox plant, there were no particle scrubbers on the stacks of the chemical processing plants. Chemical processing was carried out at night when wind conditions were considered favorable for dispersing radioactive particles more widely into the atmosphere. Winds dispersed these radioactive particles throughout the Columbia Basin region. Documents recently made publicly available

show that, during this time, DuPont (and later General Electric) Health Instruments Radiation Specialist H.M. Parker knew that stack releases were falling on the Wahluke Slope.

Also during the same time, activation products and fission products were expelled from the single-pass cooling systems of the eight (8) production reactors on the Columbia River in the 100 Areas. Radioactive chromium, zinc, zirconium, niobium and other radionuclides were released into the Columbia River.

My questions generally are these: 1) Has proper consideration been given to the nature and extent of radiation hazards remaining in the Wahluke Slope from these hazardous activities from 1944-1970, and later? 2) Has proper consideration been given to assessing the damage done to fish and wildlife from these activities, and abating this damage?

Thank you for permitting me to raise these issues with the Department of Ecology.

Yours very truly,



Kim R. Smith

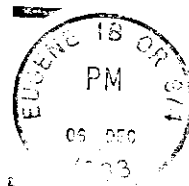
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Kim Smith

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Eugene, Oregon

97405-0505



Dib Goswami, Unit Mgr.
Washington Department of Ecology
7601 West Clearwater Avenue
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Kennewick, Washington 99336

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United States Department of the Interior

TAKE
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AMERICA

FISH AND WILDLIFE SERVICE

COLUMBIA NATIONAL WILDLIFE REFUGE COMPLEX

735 E. Main Street, P.O. Drawer F

Othello, Washington 99344-0227

(509) 488-2668

NWMP - Hanford

FILE NAME: _____

RCRA _____

CERCLA _____

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December 16, 1993

Dib Goswami

Washington Department of Ecology

7601 Clearwater Ave., Suite 102

Kennewick, Washington 99336

Dear Mr. Goswami:

This letter transmits comments on the draft document titled North Slope Expedited Response Action Proposal, Document # DOE/RL-93-47, published October 1993. I have been involved with cleanup efforts currently administered by the U.S. Army, Corps of Engineers (COE), on the North Slope lands that we manage as Saddle Mountain National Wildlife Refuge (SMNWR), and verbalized surface management priorities with COE engineers. These comments are in addition to those already submitted by the Fish and Wildlife Service (FWS) Ecological Services office in Moses Lake and Olympia.

- 1) PSN-90 is mapped incorrectly. The actual location is in Section 1, T14N, R25E, between the Mattawa Road (24 SW) and SR 24. This change is important because it is situated on land currently managed by the U.S. Fish and Wildlife Service (SMNWR) rather than the Washington Department of Wildlife (Wahluke Slope HMA).
- 2) Any site cleanup should preserve the integrity of isolated tree stands that are associated with old missile or anti-aircraft sites. These tree stands offer important "structure" for nesting Swainson's hawks, loggerhead shrikes, American kestrels, long-eared owls and other birds.
- 3) Seasonally correct surveys should be conducted before operations are carried out at these sites. Specifically, sensitive plants at mostly undisturbed sites and raptor nesting are a concern. Ferruginous hawk has not been mentioned in discussions of sensitive species, and although this species has not been verified at any of the proposed cleanup sites, the species was reported as possibly nesting at PSN 07/10 during 1993. The ferruginous hawk is a federal candidate species for protection under the Endangered Species Act, has attempted nesting on the Wahluke Slope HMA, and does nest regularly on the south side of the Columbia River.
- 4) Revegetation at disturbed sites should include a mixture of native grasses, forbs and shrubs. The loggerhead shrike, another federal candidate species, uses shrubs for nesting and elevated hunting perches.

Randy Hill, Wildlife Biologist

RH

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

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Portland, Oregon 97232-4181

TAKE
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JUL 19 1993

Walter Perro
U.S. Department of Energy
Environmental Restoration Branch
MSIN A5-19 P.O. Box 550
Richland, Washington 99352

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To John Hall	From Walt Perro	
Co.	Co.	
Dept.	Phone #	
Fax # 736-3030	Fax #	

Dear Mr. Perro:

The Fish and Wildlife Service (Service) appreciates the opportunity to provide early comments on the document entitled North Slope Expedited Response Action Proposal (ERA), DOE/RL-93-47. The Service understands that you are requesting a review of the content of the document for omissions, concerns, and additional information before the document is released for public review in August.

The ERA proposal evaluates several response action alternatives based upon potential land use categories for early remedial action cleanup of the North Slope area of the Hanford site. One of the land use alternatives is that the site will become part of a proposed National Wildlife Refuge which is being evaluated in a draft Environmental Impact Statement (EIS) for the Hanford Reach of the Columbia River. The Service has placed a high priority on this site, however, the ERA proposal will need to be comprehensive enough to address Service trust resource responsibilities regardless of the outcome of any future land transfers. In that regard, ERA cleanup should address environmental hazards relative to acceptable criteria for fish and wildlife, as well as removing Service liability for future use of the site by the public. The ERA proposal needs to clearly state that the U.S. Department of Energy (DOE) will retain liability for any future hazards to the public and for any additional environmental contaminant cleanup actions that may be identified post ERA cleanup.

The sampling plan for contaminants discussed in the document, relies on known landfills and disposal sites, however, not all landfills were sampled. There is no explanation or criteria for this decision other than a visual inspection of the sites. The Service recommends a complete utilization of a decision making process in selecting the sampling sites, including rationale and criteria for not sampling other sites.

The Service is particularly concerned about the detection of agricultural pesticides (DDT, dieldrin, and methoxychlor) and phthalate esters used as plasticizers at the Nike missile and anti-aircraft sites. Most of these chemicals are usually associated with agriculture, although use at military sites is not unlikely. The concentrations of DDT and DDE detected in sediments are below water and tissue criteria (1µg/g), associated with adverse impacts to wildlife. Surface soil samples, however, were not taken and analyzed for these organic chemicals, therefore, presence at

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Mr. Perro

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levels harmful to avian predators can not be ruled out. Since DDT has a high partition coefficient and can easily bioaccumulate, the Service suggests trapping rodents at several of the military sites to check for bioaccumulation. The criteria of 1 microgram per gram of tissue (National Academy of Science 1973) should be used to determine if significant concentrations of DDT are present. Additional analysis of raptor or magpie egg shells for DDT and DDE would provide data on the biomagnification potential of these compounds.

Contaminant analysis was limited to a few sites and situations. The document should discuss the limitations of the sampling plan in terms of what is not known to date. For example, as no analysis of surface soil samples was done, it is not known whether contaminants are bioavailable to wildlife or subject to surface transport away from the point of origin. Also, as wells were not tested, it is not known whether use of the wells for dumping may have contaminated the aquifers at the depths the wells were screened.

The three alternatives described in the ERA proposal are no action, hazard mitigation, and waste removal. The Service proposes that a fourth alternative be developed where action at individual landfills or individual "trenches" in a landfill is based on site-specific criteria. Use of the waste removal action under this alternative should be based on whether contaminants are present or suspected. Landfills with no identified contaminant concerns would be subject to hazard mitigation actions. The fourth alternative would include auger sampling of each suspected "trench" in a landfill area. While further chemical analysis would add additional expenses, the total cost of the fourth alternative would presumably be considerably lower than under the waste removal option, and contaminant concerns would still be addressed.

Under the proposed fourth alternative, a more specific list of chemical analyses than used previously, could be developed. The list would include those detected at problem levels in previous sampling, and those chemicals which are considered to pose an environmental threat. The list of chemicals should be subject to update if subsequent excavation activities indicates an additional contaminant concern. Samples should be archived for analysis in case an additional contaminant concern is identified later in the cleanup period. Reanalysis of the archived sample and detection of the new contaminant of concern might trigger excavation of a site previously selected for hazard mitigation.

For the waste removal alternative, characterization of the waste as it is removed should occur. This information could be useful for assessing potential contaminant impacts on site, as well as providing documentation for what is deposited at the Hanford Central Landfill Facility.

If landfills are left in place, a monitoring program should be developed to assess the integrity of the landfills. Contingency plans for the removal of the landfills are needed if the monitoring program shows the landfills are failing and having deleterious effects to groundwater, the environment,

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Mr. Perro

Page 3

human health or fish and wildlife resources. We recommend including a monitoring section in the ERA for landfills.

Regarding the criteria used, the ERA proposal relies on standards set by the Washington State Model Toxics Control Act (MTCA) to determine if an environmental hazard exists. The standards and criteria used in this Act need to be fully discussed in the document. The MTCA action levels are used to evaluate soil contaminant concentrations and are not inclusive of all hazardous materials or easily convertible to fish and wildlife criteria. It should be pointed out that these standards are focused on human health and not necessarily protective of fish and wildlife resources. This suggests the need to complete an ecological risk assessment to address potential impacts to natural resources. Using the state criteria, it appears that problems exist with lead and total petroleum hydrocarbons associated with site H-06, a former Nike missile battery site.

With few criteria defined in the MTCA, the Service recommends utilizing other reference standards. Using the criteria that normal soils have zinc concentrations of less than 200 micrograms per gram and strontium of 280 micrograms per gram, sediment samples show elevated levels of zinc at the anti-aircraft site H-90 and strontium at the three Nike missile batteries. To test for possible bioaccumulation, biological samples should be taken. These same samples can also be analyzed for arsenic, mercury, and silver based on the sediment analyses in Appendix A of the document.

Presumably most of the contaminants were buried at the on site landfills. Some observations of debris, including asbestos tile on the ground surface plus the wind erosion of one of the landfills, suggests the need to assess the potential for off site and on site migration and exposure of materials placed in the landfills. Other factors associated with this assessment should include an evaluation of whether, to what degree, and by what methods contaminants are likely to move. Some recommended issues that should be discussed include: rainfall, soil types, groundwater depth, impermeable and semipermeable geological formations, wind velocities, and vegetation cover. These factors should be discussed in the description of the sites evaluated in this document. As an example of how contaminants might be exposed or move, a breach of the Wahluke Branch Canal in the wrong place could mobilize buried contaminants. Canals in the project area have breached in the past.

Standards for obtaining top soil or fill material should be developed in the ERA proposal. The Service recommends that fill material or top soil not be removed from sites that have not been previously disturbed and have a representative native plant community. Standards should also be developed for any cleanup activities which may impact the woody vegetation at the Nike missile sites, anti-aircraft and control sites on the North Slope.

The only available information on post cleanup reclamation is a single sentence describing reseeding with native grasses. A section detailing revegetation procedures should be added to the document. The section should identify grass species to be used, describe planting procedures and post seeding monitoring efforts, and define criteria which would indicate planting

Mr. Perro

Page 4

failure and trigger another planting effort. Reclamation should also occur on roads as well as cleanup sites. Irrigation for revegetation of sites should be included in the ERA proposal.

Some site names and numbers are not standardized in the document, causing difficulties for the reader in matching up text, figures, and appendix data. The Service suggests defining the letter and number codes for the landfills, sampling, and military sites and the use of larger size maps for the figures to aid in locating the sites.

The following are some specific comments.

Page 29, first paragraph. The statement beginning as "these analytes are indicative of spraying residue..." should be removed. As all samples were taken several feet below the surface of the ground and some were in areas with vegetation that indicated no previous farming activities, this conclusion does not seem appropriate.

Page 29, last paragraph. The information provided addresses potential for agricultural development only. Please discuss the potential for residential development which could occur with waste removal.

Page 30, Section 5.1. Under the no action alternative, would the Remedial Investigation/Feasibility Statement address all the sites or only the two sites listed under the Tri-Party Agreement?

Page 30, ordnance survey/cleanup paragraphs. The wording in the document gives the impression that only the survey will be conducted. Please include information on cleanup activities.

Page 30, section 7.0. When evaluating alternatives, the no-action alternative needs to be included because it provides a comparison with which the other alternatives can be measured against. We strongly suggest that the ERA include protection of environmental health as one of the criteria. The section titled "Environmental Impacts" assesses only the impact associated with cleanup activities. The potential contaminant impacts of not cleaning up the landfills should also be mentioned.

Page 32, second paragraph. Waste removal will also impact habitat at the waste disposal site and any borrow sites needed to acquire backfill material. These impacts should be discussed.

Page 34, table 7.1. Referring to impacts to vegetation from cleanup as "temporarily" stressed is misleading when this vegetation type may take decades to regenerate.

Page 35, fifth paragraph. This first sentence should read "the waste removal alternative..."

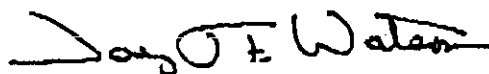
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Mr. Perro

Page 5

We look forward to continuing to work with you on various assessment, cleanup, and restoration issues at the Hanford Site. If you have questions regarding this memorandum, please contact Don Steffeck, Chief, Division of Environmental Contaminants or Tom O'Brien at (503) 231-6223.

Sincerely,

~~Adm~~ Assistant Regional Director

943289.2059

Reference:

National Academy of Sciences and National Academy of Engineering, 1973
Water Quality Criteria 1972. U.S. Government Printing Office 594p.

CURT SMITH
Director



STATE OF WASHINGTON
DEPARTMENT OF WILDLIFE
c/o Department of Ecology
7601 W. Clearwater, Suite 102, Kennewick, WA 99336

July 13, 1993

To: Steve Cross
Washington Department of Ecology, Hanford Project
From: *[Signature]*
John Hall
Habitat Biologist, Hanford Site

Subject: Comments on DOE/RL-93-47, Rev. 0: North Slope Expedited Response Action Proposal

I have reviewed the cited document and offer the following comments. Please consider ensuring that these comments are incorporated into the revised document. In general, any cleanup actions performed in accordance with the North Slope Expedited Response Action (ERA) should be consistent with the different land-use alternatives that were evaluated for the North Slope as part of the Hanford Reach of the Columbia River Draft Environmental Impact Statement (DEIS). The following specific comments are consistent with that basic philosophy.

- o Page 1, Section 1.1 Goal: The goal statement should refer to the Hanford Reach DEIS and stress that remediation will be consistent with each of the alternatives evaluated by the DEIS so that none of the alternatives is precluded by the ERA.
- o Page 23, Section 2.2.5 2, 4-D Disposal Site: Additional information should be provided in this section to clarify the status of the tanks. If there is a possibility of residual herbicide remaining within any portion of the flattened (but mostly integral?) tanks, then the ERA proposal needs to justify why the tanks are to be left in place.
- o Page 29, Section 5.0 Response Action Alternatives: A reference should be provided for the U.S. Fish and Wildlife Service's ranking of proposed refuge projects. Moreover, it should be clarified whether the proposed refuge has the same boundaries as the entire North Slope area or whether it is only a portion of it. This clarification would be helpful because only a portion of the North Slope is currently managed by USFWS as a refuge.

Steve Cross
July 13, 1993
Page 2

- o Pages 30 and 31, Section 5.2 Hazard Mitigation:
 - 3rd paragraph: "Local source" of fill is too vague. Fill material should be from an already approved fill source or from an already otherwise disturbed site. The ERA should ensure that relatively undisturbed habitat areas are not exploited as sources of fill. Also, revegetation efforts should include native shrubs if these are naturally part of the site's floral components and the disturbed area is extensive.
 - 4th paragraph: A number of birds of prey (raptors) nest in the trees associated with the military sites. Cleanup activities at these sites need to be timed appropriately so that the nesting cycle of these birds is not disrupted. Moreover, nest trees are at a premium on the North Slope. Thus, the trees themselves should be protected from harm due to cleanup activities.
 - 5th paragraph: Who will perform the semiannual survey? Can the ERA commit any future site landlord to these surveys?
 - 10th paragraph: This paragraph is narrowly written in regard to its focus on only threatened and endangered species. All wildlife species, and especially those identified by the Washington Department of Wildlife as a Priority Species, should be considered when attempting to minimize the impact to wildlife by cleanup activities.
 - 11th and final paragraph: The DEIS No Action alternative should be more clearly distinguished from the ERA No Action alternative.
- o Pages 31 and 32, Section 5.3 Waste Removal: The same comments, in regard to fill source, raptor disturbance, and Priority Species, discussed for Section 5.2 above apply here as well.
- o Page 36, Section 8.0 Preferred Remedial Alternative:
 - 1st paragraph: More importantly, establishment of the North Slope as a wildlife refuge is the proposed alternative of the Hanford Reach DEIS.
 - 3rd paragraph: This paragraph is unnecessary and, moreover, contradictory to the first paragraph of this section in which it is assumed that land use of the North Slope will be as a wildlife refuge.

jah

cc: Ted Clausing, WDOH
Ron Friesz, WDOH
Dibakar Goswami, WDOE
Darci Teel, WDOE
JAH: LB/File

CURT SMITH
Director



STATE OF WASHINGTON
DEPARTMENT OF WILDLIFE

DRAFT

1701 S. 24th Avenue, Yakima, WA 98902-5720

July 8, 1993

Mr. Dibakar Goswami
Washington Department of Ecology
7601 W. Clearwater Avenue, Suite 102
Kennewick, WA 99336

Dear Mr. Goswami:

Subject: Comments on DOE/RL-93-47, Rev 0: North Slope Expedited
Response Proposal

Enclosed are the Department of Wildlife's comments on the subject document. In general, any cleanup actions performed in accordance with the North Slope Expedited Response Action (ERA) should be consistent with the different land-use alternatives that were evaluated for the North Slope as part of the Hanford Reach of the Columbia River Environmental Impact Statement (EIS) (currently in draft). My specific comments are consistent with that basic philosophy.

Thank you for considering my comments. If you have any questions please contact John Hall of my staff at 736-3028.

Sincerely,

Ted Clausing
Regional Habitat Biologist - Region 3

TC:jah

Enclosure

cc/enc: Department of Ecology
S. Cross
D. Teel
Department of Wildlife
J. A. Hall
R. Friesz

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DRAFT

Dibakar Goswami
July 8, 1993
Page 2

- o Page 1, Section 1.1 Goal: The goal statement should refer to the Hanford Reach DEIS and stress that remediation will be consistent with each of the alternatives evaluated by the DEIS so that none of the alternatives is precluded by the ERA.
- o Page 23, Section 2.2.5 2, 4-D Disposal Site: Additional information should be provided in this section to clarify the status of the tanks. If there is a possibility of residual herbicide remaining within any portion of the flattened (but mostly integral?) tanks, then the ERA proposal needs to justify why the tanks are to be left in place.
- o Page 29, Section 5.0 Response Action Alternatives: A reference should be provided for the U.S. Fish and Wildlife Service's ranking of proposed refuge projects. Moreover, it should be clarified whether the proposed refuge has the same boundaries as the entire North Slope area or is only a portion of it. This clarification would be helpful because only a portion of the North Slope is currently managed by USFWS as a refuge.
- o Pages 30 and 31, Section 5.2 Hazard Mitigation:
 - 3rd paragraph: "Local source" of fill is too vague. Fill material should be from an already approved fill source or from an already otherwise disturbed site. The ERA should ensure that relatively undisturbed habitat areas are not exploited as sources of fill. Also, revegetation efforts should include native shrubs if these are naturally part of the site's floral components and the disturbed area is extensive.
 - 4th paragraph: A number of birds of prey (raptors) nest in the trees associated with the military sites. Cleanup activities at these sites need to be timed appropriately so that the nesting cycle of these birds is not disrupted.
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 - 10th paragraph: This paragraph is narrowly written in regard to its focus on only threatened and endangered species. All species identified by the Washington Department of Wildlife as Priority Species should be considered when attempting to minimize the impact to wildlife by cleanup activities.
 - 11th and final paragraph: The DEIS No Action alternative should be more clearly distinguished from the ERA No Action alternative.
- o Pages 31 and 32, Section 5.3 Waste Removal: The same comments, in regard to fill source, raptor disturbance, and Priority Species, discussed for Section 5.2 above apply here as well.

DRAFT

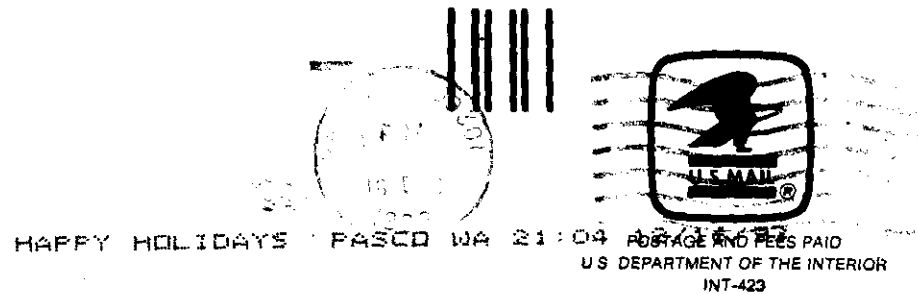
Dibakar Goswami
July 8, 1993
Page 3

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 - 1st paragraph: More importantly, establishment of the North Slope as a wildlife refuge is the proposed alternative of the Hanford Reach DEIS.
 - 3rd paragraph: This paragraph is unnecessary and, moreover, contradictory to the first paragraph of this section in which it is assumed that land use of the North Slope will be as a wildlife refuge.

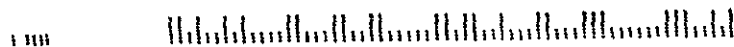
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DIB GOSWAMI
WA DEPT OF ECOLOGY
7601 CLEARWATER AVE SUITE 102
KENNEWICK WA 99336



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Confederated Tribes and Bands
of the Yakima Indian Nation

Established by the
Treaty of June 9, 1855

JUL 1993
RECEIVED

July 19, 1993

Mr. Dib Goswami
Department of Ecology
7601 W. Clearwater, Ste 102
Kennewick, WA 99336

Subject: HANFORD'S NORTH SLOPE EXPEDITED RESPONSE ACTION;
COMMENTS ON--

Dear Mr. Goswami:

Thank you for the opportunity to make preliminary comments on the "North Slope Expedited Response Action" (ERA). This ERA is in response to an agreement by Washington State Department of Ecology (WDOE), the Environmental Protection Agency (EPA), and the United States Department of Energy (USDOE).

1. A natural resource damage assessment should be conducted to determine the extent of injury to the natural resources in this area, as well as an estimate of the injury and damages following remediation.

2. The ERA should include action to remediate Treaty fishing sites on the shore of Columbia River within the North Slope area, as necessary. Such sites were actively used prior to the beginning of the Hanford project.

In considering the clean up activities and scenarios for clean up, the effects of air borne releases from the old reprocessing facilities to the south should be considered for cumulative contamination in the groundwater and soil. For example, zones on the North Slope where plumes of radioactive materials from reprocessing facilities in the 200 West Area impinged on the upward sloping ground should be checked for I-129 contamination in the soil and groundwater beneath the impingement zone.

3. DOE should consider applications of new technology when the mitigation alternative is determined to be appropriate. Such action is consistent with EPA rule 40 CFR 300.430 (a) (E) concerning RI/FS's.

4. An archeological and cultural survey should be conducted and attached to the required RI/FS. There are approximately 32 known archeological sites, including three burial sites, located in the North Slope area. These should be identified to cognizant cleanup

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personnel via a non-public document, since the mitigation or removal activities may disturb or affect these sites.

Actions should be required to avoid disturbance of these sites. New sites revealed in the requested survey should be added to the list of known sites to provide an adequate base for conducting remediation/removal of contamination.

5. The selection of the clean up alternatives should assure that YIN rights for usage of the subject land and riverine area are in no way diminished now or in the future, beyond the time when institutional controls can be relied upon to protect human health and the environment.

Additional detailed comments are contained in Attachment A to this letter.

Sincerely,

F.R. Cook

F. R. Cook, Technical Analyst
Environmental Restoration/Waste Management Program
Yakima Indian Nation
1933 Jadwin Avenue
Suite 110
Richland, WA 99352

ATTACHMENT A: DETAILED COMMENTS TO YIN LETTER OF JULY 19, 1993
REGARDING HANFORD NORTH SLOPE REMEDIATION

cc. Jim Warner, DOE/EM (fax)
Thomas Grumbly, DOE/EM
Mary Riveland, WDOE
K. Clarke, DOE/RL
Jim Peterson, DOE/RL (5YP)
R. Jim ER/WM, YIN (fax)
M. Dick Squeochs, YIN
Carroll Palmer, YIN
Mike Bauer, YIN
C. Sanchey, YIN
Washington Gov., M. Lowry
U. S. Congressman, J. Inslee
U. S. Senator, P. Murray
Joe Stohr, WA Dept of Ecology
David Berick
Michael Campbell

ATTACHMENT A: DETAILED COMMENTS TO YIN LETTER OF JULY 19, 1993
REGARDING HANFORD NORTH SLOPE REMEDIATION

1. Several contaminants, including 2,4-D, JP-3 fuel, red fuming nitric acid (RFNA), aniline, hydrazine, heavier than diesel liquids and trichloroethylene have been associated with the Nike missile sites. Soil surveys should be conducted to determine if these contaminants are present and their danger to future generations and other users described in the subject ERA for all potential contamination areas. Sampling of sites is insufficient to assure that all sites are uncontaminated.

2. Further tests should be conducted at the land fill for the 2,4-D disposal site along the Columbia River to determine if the contents of the barrels have leached to the soils.

3. deleted

4. Further surveys should be accomplished to determine the DDT usage in the area. Although not having been used for years, it is still evident in the ecosystem. The July 15, 1993 issue of the Tri-City Herald, contains an article concerning excessive residual DDT in the Yakima River.

5. Residues of red fuming nitric acid (RFNA) were identified in the subject ERA as potentially having been discarded in acid neutralization pits, potential without neutralization. Nitrate levels in the ground water could be excessive as a result of disposal of nitrates. Each of these pits should be individually surveyed for nitrates; and, if any excessive nitrate is found in the soils, the ground water should also be surveyed to determine the need for groundwater remediation. Groundwater should in general be remediated to allow use for domestic purposes or for watering livestock, consistent with Treaty usage rights pertaining to the pasturing of stock.

6. All carcinogenic contaminants should be removed from the area or destroyed, including petroleum hydrocarbons and asbestos in order to provide safe access to YIN members exercising usage rights under the Treaty of 1855.

7. The ERA suggests that a flora and fauna survey will be conducted where ground disturbance will occur. We request that the YIN ER/WM Program be notified of these surveys to so as to allow YIN participation. These surveys are discussed in Appendix D, page D-3.

8. Although the North Slope remediation may not directly affect the Salmon spawning on the Columbia, care during clean up activities should be taken to avoid river pollution.

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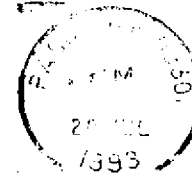
9. The flora of the North Slope area, especially along the Columbia River, should be identified in a remedial investigation to identify species that are endangered and to provide information for improving the habitat and replenishing species lost because of Hanford operations. More specifically, two plants that are currently on the State endangered and Federal candidate species lists should be addressed. Columbia yellowcress (*Rorippa columbiae*), and the Silky northern wormwood (*Artemisia campestris* ssp. *borealis* var. *wormskioldii*) are on these lists. Populations of Columbia yellowcress are known to inhabit shoreline sites along the Hanford Reach, including the North Slope. The Silky northern wormwood has been found further up the Columbia River and on the same side as the "North Slope" area. Although the silky northern wormwood has not been found on the Columbia Reach, surveys thus far have been minimal. Another rare species that is listed as State threatened and on the federal candidate list is the Columbia milkvetch (*Astragalus columbianus*). And this plant is near the "Riverland" area up the river from the "North Slope" area. Again none have been found in the "North Slope" area but that may be due to minimal surveys.

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Confederated Tribes and Bands
of the Yakima Indian Nation

Post Office Box 151, Fort Road
Toppenish, WA 98948



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Mr. Dib Goswami
Department of Ecology
7601 W. Clearwater Ste 102
Kennewick WA 99336



CORRESPONDENCE DISTRIBUTION COVERSHEET

Author

Addressee

Correspondence No.

Gary H. Freedman,
Nuclear Waste Program

Admin. Record, WHC

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Subject: WAHLUKE SLOPE COMMENT RESPONSE

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